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Evaluation Memo

Application Number: R13-1830M

Facility ID Number: 099-00010

Name of Applicant: Braskem America, inc. Neal Plant

Name of Facility: Kenova

Application Type: Class II Administrative Update

Received Date: April 7, 2017

Complete Date: April 7, 2017

Due Date: June 6, 2017

Permit Writer: Renu M. Chakrabarty, PE *PMC*

Date: May 31, 2017

Braskem operates a polypropylene production facility located in Kenova, WV; the facility is commonly referred to as the Neal Plant. Braskem is submitting this application to revise the emissions limitations associated with the OSBL and ISBL flare emission points identified as 91E and B542E. The updates reflect an increase in VOC emissions from the flare due to a revision to AP-42. Additionally, temporary natural gas-fired boiler B603 was shut down on July 1, 2013, and therefore references to it have been removed from the permit. Finally, the applicant has requested that a permit stipulation for monthly visible emission readings be no more than 45 days apart be removed so that the maximum number of days between consecutive readings is not specified.

VOC Emissions from Flares

Table 4.1.1 of R13-1830K currently limits emissions VOC emission points 91E and B542E to 29.16 lb/hr and 7.38 tpy. In December 2016 EPA updated Chapter 13.5 Industrial Flares in AP-42, including revising the VOC factor from 0.14 lb VOC/MMBTU to 0.66 lb VOC/MMBTU.

The permit limits the total VOC feed to the OSBL and ISBL flares to 5,000,000 pounds per year. Therefore the change in VOC emissions from the OSBL and ISBL flares are:

	pound/hour	ton/year
R13-1830K	29.16	7.38
R13-1830M	125.71	34.72
Change	+96.55	+27.34

The VOC emission increases meets the requirements for a Class II administrative update according to 45CSR13 § 4.2.b.1. because the updated emission factor reflects the most recent information, and does not trigger a major modification per 45CSR14.

Removal of temporary natural gas-fired boiler B603

Temporary natural gas-fired boiler B603 was shut down on July 1, 2013 and removed from the site on August 27, 2013. Therefore, all references are removed from the permit. This meets the Class I administrative update criteria of 45CSR13 § 4.2.a.6., as well as the Class II administrative update criteria of 45CSR13 § 4.2.b.2.

Monthly visible emission readings

The applicant has requested that a permit stipulation for monthly visible emission readings be no more than 45 days apart be removed so that the maximum number of days between consecutive readings is not specified. However, the applicant has had upset conditions resulting in visible emissions from the flare. Additionally, such a relaxation of a monitoring requirement would not be allowed as an administrative update. Therefore, this portion of 4.2.1. of the permit will remain.

Changes to permit R13-1830M:

- Updated the Emission Units in 1.0 to remove Boiler #3 (B603).
- Updated the emission limits in Table 4.1.1 to remove those from Boiler #3 (Emission Point 73E) and updated the VOC emissions from the OSBL and ISBL flares (Emission Points 91E and B542E).
- The appropriate sections of 4.1.8 referencing Boiler #3 (B603) have been removed.

Recommendation:

It is the recommendation of the writer that this Class II Administrative Update Permit R13-1830M be granted to Braskem America, Inc., Neal Plant located in Kenova, Wayne County, WV.